

Leach saw larger specimens than those that he placed in his cabinet. However that may be, there is no question that the true *I. londinensis*, judging from the only examples of it that are known, is a much larger species than the one that has been mistaken for it on the Continent. Add to this that the tergal striæ are much more numerous and close-set in *I. londinensis* than in *teutonicus*, and no one can doubt that the two are perfectly distinct species. It is safe, moreover, to prophesy that when fresh examples of *I. londinensis* come to hand for examination further differences will be found in the structure of its copulatory organs.

The differences between the two may be tabulated as follows:—

- a. Total length from about 38 to 48 mm., width 4; tergal striæ very numerous, fine, and close-set, the intervening spaces rarely exceeding and generally less than the diameter of the porous area; caudal process short, subcylindrical, blunt-pointed or obsolete (submucronate) *londinensis*.
- b. Total length from about 25 to 35 mm., width 2·5; tergal striæ much less numerous and further apart, the intervening spaces generally much exceeding the diameter of the porous area; caudal process obtusely angular, not even submucronate *teutonicus*.

I. teutonicus occurs in Scandinavia, Denmark, Western Germany, the north of France, and the south of England. The British Museum has specimens from Kent, Middlesex, Surrey, Hampshire, Oxford, and Warwickshire, but none from South Wales, Gloucestershire, Somerset, Devon, or Cornwall, although the Millipedes of these counties have been fairly well worked.

XXVI.—*Descriptions of Two Species of Cypræa, both of the Subgenus Trivia, Gray.* By JAMES COSMO MELVILL, M.A., F.L.S.

FOR the opportunity of examining the two cowries now thought worthy of description I am under much obligation to Mr. Frederick L. Button, of Oakland, California, a most enthusiastic cypræologist who has devoted especial attention to the *Trivia*. With much liberality he has from time to time forwarded me series of species, inhabitants of the Western American seas, including *fusca*, *californica*, and *sanguinea*, all of Gray, all three exhibiting much variation, with several

doubtful forms. Recently the authorities of Stanford University, California, organized a scientific expedition to the Galapagos Isles, and Mr. Snodgrass collected there one of the two following, a remarkable shell, on which I have obtained the opinion of Mr. Sowerby, Mr. Edgar Smith, Mr. E. R. Sykes, and others, they all confirming my own and Mr. Button's views that it could hardly be referred to any known species.

Cypræa (Trivia) galapagensis, sp. n.

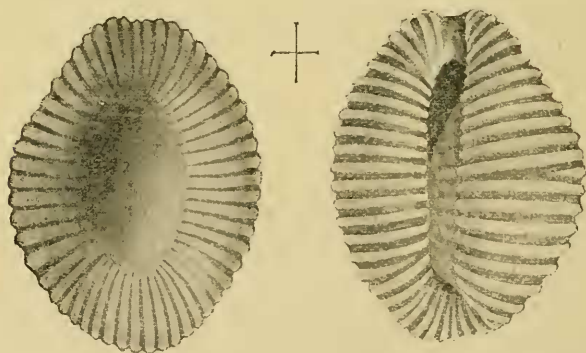
C. (Trivia) testa ovato-rotunda, parva, nigrescenti-purpurea, lateribus paullum dilatatis, extremitatibus vix productis, obtusis, costis numerosis, crassis, lævibus, pallide cinereis, dorsaliter apud medium superficie callosa omnino oblecta, versus extremitatem utramque callositatis, velut ocello, albo-maculata, nitidissima, basi convexiuscula; apertura arcuato-recta; columella haud varicosa.

Long. 8, lat. 5.75 mm. (spec. maj.).

„ 7, „ 5 „ (spec. min.).

Hab. Insula "Albemarle," e grege Galapagensi.

This particularly interesting and select form, of which I have seen three specimens, as just stated, collected for the Stanford University of California by Mr. Snodgrass, differs from *sanguinea*, Gray, in its much smaller size, distinct coloration, being blackish purple instead of madder-brown, and more numerous ribs, these being flatter and thicker in



Cypræa galapagensis.

proportion. But the chief peculiarity consists in the shining enamelled callosity over the whole centre of the dorsal region, completely obliterating the sulcus, if any exists, which I

doubt, and further rendered conspicuous by two white spots, one towards either extremity, at the point of junction of the ribs with the callosity, and both quite covered by it.

Affinity also exists between *galapagensis* and *pulla*, Gask., and likewise *subrostrata*, Gray, both inhabitants also of the Galapagos group. These small species are much of the same size, the latter possessing a decided sulcus, and with beaked extremities—hence its trivial name; whilst *pulla* is less globose, having fine ribs, with hardly any definition even of a sulcus.

No trace of any dorsal callosity has, so far as I am aware, ever been found in any other *Trivia* such as exists in the species before us.

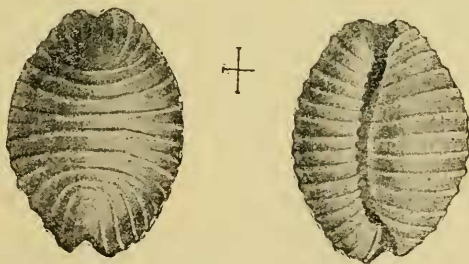
Cypræa (Trivia) Buttoni, sp. n.

C. (Trivia) testa parva, ovato-globosa, pallide straminea, apud latera paululum dilatata, costis ad quatuordecim, fortibus, continuis, hic illic interruptis vel subdivaricatis, ad dorsum præcipue latis, lævibus, albis, sulco nullo, apud extremitates paululum producta, basi subconvexa, dentibus labialibus ad octodecim.

Long. 5·50, lat. 4 mm.

Hab. — ? (*F. L. Button, Esq.*).

A small, globular, straw-coloured *Trivia*, few ribbed, these being continuous, occasionally interrupted or subdivaricate, broad, especially dorsally; there is no sulcus present; the shell is slightly produced at the extremities; labial teeth eighteen in number.



Cypræa Buttoni.

But few species are very comparable with this: *acutidentata*, Gask., may be akin, but the type is lost, and I have never seen anything but the original insufficient description; *pauci-*

lirata, Sowb., possesses a well-defined sulcus, and the ribs seem more acute than are those of *Buttoni*; *candidula*, Gask., is larger and whiter, with more frequent costæ; *producta*, Gask., as its name implies, is produced at its extremities, and the ribs are of a different character, very acute and thin. There is no sulcus, however, in this species. The ribs, likewise, of *pellucidula*, Gask., are far more numerous, and the substance more delicate than in our shell, which it affords me sincere pleasure to be able to dedicate to Mr. F. L. Button, its discoverer.

XXVII.—*Description of a new Species of Papilio from Bwool, North Celebes.* By H. GROSE-SMITH, F.E.S., F.Z.S., &c.

Papilio Dixoni.

♀.—*Upperside.* Anterior wings rather pale fuliginous brown, darker at the base and the costal and outer margins; the dark areas more restricted than in the same sex of *P. Kühni*, Honrath, the veins and rays in the cell and between the veins also dark fuliginous brown. Posterior wings pale fuliginous brown, with the base and outer third darker; the crimson markings on the underside showing indistinctly through the wings.

Underside. Anterior wings as above. Posterior wings brownish black, with a pale crimson irregular band a little beyond the cell, extending obliquely from near the abdominal margin to the upper median nervule, much narrower than the crimson band in a similar position on the underside of the posterior wings of *P. Kühni*; outside this band crossing the disk, between the veins, is a row of four large pale crimson lunules, of which the first and fourth are the narrowest.

Expanse of wings $4\frac{1}{2}$ inches.

In the collection of Mr. Grose-Smith.

Nearest to the female of *P. Kühni*, which it resembles in shape. This butterfly was captured by Mr. Frank Dixon about 30 miles inland at an elevation of 800 feet.